



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,002	11/30/2001	Michael Neal	DEM1P009	9261

36088 7590 09/12/2005

KANG LIM  
3494 CAMINO TASSAJARA ROAD #436  
DANVILLE, CA 94306

EXAMINER
----------

RUHL, DENNIS WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

3629

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/007,002

Applicant(s)

NEAL ET AL.

Examiner

Dennis Ruhl

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,9-11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11 and 14-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 3629

The response of 6/14/05 has been entered and considered. Currently claims 1-6,9-11,14-19 are pending. Applicant's arguments will be addressed at the end of this office action.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 14-21 are rejected under 35 USC 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two prong test of:

1. Whether the invention is within the technological arts; and
2. Whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere idea in the abstract (i.e. abstract ideas, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e. physical sciences as opposed to social sciences for example), and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, use or advance the technological arts.

For claims 14-19, the body of the claims does not require or recite the use of any technology at all. The recited steps could all be done mentally in a person's brain or on

Art Unit: 3629

paper. Technology is required to be considered statutory subject matter. The claims only recite an abstract idea. The recited steps do not apply, involve, use, or advance the technological arts since all of the recited steps can be done with no technology at all. As to the technological arts recited in the preamble ("computer implemented method), mere recitation in the preamble or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is a positive recitation in the claim as a whole to breathe life and meaning into the preamble. In the present case because nothing in the body of the claim brings any technology into the body of the claim, the claims are still considered to be non-statutory for failure to recite a method that is considered to be within the technological arts.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 3,16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has recited that the computer code selects products that provide optimization of total profit. How can the computer code know what products this will be?

Art Unit: 3629

One of skill in the art would have no way to know how to give the computer code the ability to “see into the future” and predict what products will satisfy what is claimed. Undue experimentation would necessarily be involved and one of skill in the art would not be able to make and/or use the invention was claimed. Also lending to the non-enablement of the claim is the fact that it is rejected under 35 USC 112,2. If you don’t know what that term means or what is being claimed, you cannot make the invention. Claims 3,16 are not enabled to one skilled in the art.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6,9-11,14-19, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claim 1, what is the language “wherein the optimizing of prices meets the plurality of rules” intending to recite? This looks like a method step to the examiner, but the preamble and the rest of the claim are directed to an apparatus, not a method. What structure does this limitation result in? This is not clear. Also, this is a confusing limitation because previously it has been recited that there is code for relaxing rules and applicant has argued this for patentability, but at the very end of the claim it is recited that all rules are satisfied. This renders the claim indefinite.

For claim 14, in a similar sense as to claim 1, how can applicant recite at the end of the claim that the optimizing of prices meets the plurality of rules. Previously it is

Art Unit: 3629

claimed that rules are relaxed because they are not feasible. How can the rules be recited as being satisfied when some are being relaxed because they are not feasible?

This language seems to contradict the previous recitations in the claims.

For claims 3, the examiner finds the claim to be indefinite. This is because the way the claim is written it does not make sense. The claim reads, "selects products provides an optimization". This portion reads very poorly and makes no sense. What is being claimed here? Is applicant claiming that the optimization is done with respect to total profit? The scope of this claim is not clear. The examiner honestly does not understand what is being claimed here. Correction is required.

For claims 6,19, what is "bound data"? What does this refer to and what is the scope of this term? Data is data, what you call it may or may not mean anything and in this case it is not clear to the examiner what this means and what the scope of this term is. This is still unclear.

For claim 16, what is being claimed here? Is applicant claiming that the optimization is done with respect to total profit? What is meant by reciting the selection of products that provide an optimization of total profit? Can a product provide this optimization? The scope of this claim is not clear. The examiner honestly does not understand what is being claimed here. Correction is required.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3629

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 are rejected under 35 U.S.C. 102(b) as being anticipated by Reuhl et al. (5873069).

For claims 1,14, Reuhl discloses a method and system where sales and price data is entered into a computer system and the system then “optimizes” the prices of numerous products based on the inputted sales data. The software has criteria (rules) for figuring out the final pricing of the products. The rules include looking for sales prices, advertised prices, etc., as well as applying a cent code to the resulting lowest price, and then checking to ensure that the new active price with the cent code is not greater than the competitor price. If the new price with the cent code results in the price being higher than the competitor price, that cent code is ignored (an infeasible rule if relaxed) and a new active price is calculated with a new cent code (another rule is implemented). The rules are prioritized as claimed because the rules for figuring out prices look to various conditions and moves on to other conditions if prior conditions are not feasible (result in the price being higher than the competitor). The storage medium of claim 1 is disclosed in column 3, lines 29-32. The steps of storing initial prices are satisfied because at some point you must input some kind of price into the system. This is inherent. Reuhl discloses code for designating a subset of products to optimize prices for. This is because the computer system (software) only optimizes prices for products that have had new sales data entered into the system. So if sales data for televisions is updated in the system, the prices for batteries will not be changed. The

Art Unit: 3629

examiner encourages applicant to read the entire patent to Reuhl, but also points applicant to the following sections of particular relevance to the claimed invention. See column 6, lines 29-44; col. 7, lines 23-39; col. 8, lines 12-27; col. 10, lines 28-32; col. 11, and lines 26 to column 12, line 52.

For claims 2,15, the "N" products are the number of products that the new sales data relates to. N can be the number of televisions that prices are being optimized for.

For claims 3,6,11,16,19, due to the 112,2<sup>nd</sup> paragraph problems noted by the examiner, as the claims are best understood by the examiner, Reuhl discloses the claimed invention.

For claims 4,9,17, with respect to "initial prices", one you run an optimization routine, the very last price prior to the optimization is the "initial price". Reuhl discloses what is claimed.

For claims 5,10,18, the examiner considers it inherent that the system of Reuhl has "code for providing new data". This can be interpreted to be the software drivers that are used in computers to allow data transfer. This could be a modem driver, a keyboard driver, etc.. Anything that allows or assists in the taking in or transmitting or processing of data reads on what is claimed.

### ***Response to Arguments***

1. Applicant's arguments filed 6/14/05 have been fully considered but they are not persuasive.



With respect to the 101 rejection and the amendment that puts "computer implemented" in the preamble, the mere recitation in the preamble or mere implication of employing a machine or article of manufacture to perform some or all of the recited steps does not confer statutory subject matter to an otherwise abstract idea unless there is a positive recitation in the claim as a whole to breathe life and meaning into the preamble. The claims are still not considered to be statutory and the rejection will be maintained.

With respect to claims 3 and 16, and the 112,1<sup>st</sup> rejection and the 112,2<sup>nd</sup> rejection, the arguments are moot based on the new rejections based on the new language. It is still not clear what is being claimed in the newly added language. See the 112 rejections in this office action for the reasoning. The argument is moot based on the new reasons for the rejections.

With respect to the 112,2<sup>nd</sup> rejection for claims 6 and 19, it is still not clear what the recitation of "bound data" means. The examiner has read the cited portion of the specification but a little more explanation from applicant would have been helpful. After reading the specification, the examiner is still not clear as to what the term "bound data" means. The argument is non-persuasive.

With respect to the 102 rejection, the arguments are non-persuasive. The examiner has addressed the new limitations in the claims in the 102 rejections and feels no further comments are really necessary. The optimization of Reuhl has prioritized rules as far as figuring out the product prices goes, and sometimes when applying the rules, the resulting price is still higher than a competitor's price, so a new rule is

Art Unit: 3629

implements to arrive at a price that is not higher than the competitor's price. This is the same as relaxing infeasible rules and looking to new rules as claimed to that they can become feasible. The rejection will be maintained.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis Ruhl whose telephone number is 571-272-6808. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 571-272-6812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DENNIS RUHL**  
**PRIMARY EXAMINER**